Claims

1. Method of controlling the transmission power used in a digital radio link in a system where a base station and a personal station are parties to the radio connection and during operation between them either
5 party may send a power control command, which will change the transmission power of the other party,

c h a r a c t e r i z e d in that

when the transmission rate of the first party changes it will inform the second party of the new rate,
10 in response to the message the second party changes the power control command to be sent to the first party to be in accordance with the new rate,

the first party changes the reception of its own power control command to be in accordance with the new rate.

15 2. Method as defined in claim 1, c h a r a c t e r i z e d in that when the transfer rate of the second party changes:

the first party will change the power control command to be sent to the second party,

the second party will change the reception of its own power
20 control command.

3. Method as defined in claim 1, c h a r a c t e r i z e d in that the power control command is formed of power control commands and when the transmission rate of the first party becomes slower the second party will lower the frequency of power control commands to be sent to the first party
25 and, correspondingly, when the transmission rate becomes higher, the second party will increase the frequency of power control commands.

4. Method as defined in claim 1, c h a r a c t e r i z e d in that the power control command is formed of power control commands of several bits and when the transmission rate of the first party is lowered, the second party
30 will shorten the length of the power control command and, correspondingly, when the transmission rate becomes higher the second party will extend the length of the power control command.

5. Method as defined in claim 1, c h a r a c t e r i z e d in that the power control command is formed of power control commands and when the
35 transmission rate of the first party is lowered, the second party will lower the energy of power control commands to be sent to the first party and,

correspondingly, when the transmission rate of the first party becomes higher, the second party will increase the energy of power control commands.

6. Method as defined in claim 1, c h a r a c t e r i z e d   in that the change in transmission rate of the first party is declared in a field of the transmission frame reserved for this purpose.

7. Method as defined in claim 1, c h a r a c t e r i z e d   in that in such a system where there is an individual transmission frame for each transfer rate, a change in transmission rate of the first party is declared by changing the structure of the transmission frame directly to correspond with the new transfer rate.

8. Method as defined in claim 1 or 2, c h a r a c t e r i z e d   in that the power control command has a quick state and a slow state, of which the slow state is used when the transmission of the commanded party is in a DTX state.

9. Method as defined in claim 1 or 2, c h a r a c t e r i z e d   in that the power control command has several states, whereby when the transmission rate of a party changes, the opposite party will send the power control command in one of these states.

10. Method as defined in claim 1 or 2, c h a r a c t e r i z e d   in that when the power control command changes, the size of the transmitter's power control step is also changed.

11. Method as defined in claim 1 or 2, c h a r a c t e r i z e d   in that the power control command in one direction is changed in reverse proportion to the load of the opposite transfer direction.